

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:

Ravi Chandra *et al.*

Application No.: 09/872,920

Filed: June 2, 2001

For: METHOD AND APPARATUS FOR
PROCESS SYNC RESTART

Examiner: Shingles, Kristie D.

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APPEAL BRIEF

The Appellants submit the following Appeal Brief pursuant to 37 C.F.R. § 41.37(c) for consideration by the Board of Patent Appeals and Interferences. The Appellants authorize the amount of \$540.00 to cover the cost of filing the opening brief as required by 37 C.F.R. § 1.17(f) to be charged to Deposit Account No. 02-2666. If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 02-2666.

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I. REAL PARTY IN INTEREST

Ravi Chandra, Gerald Neufeld, and Jenny Yuan, the parties named in the caption, transferred their rights to the subject Application through an assignment recorded on October 5, 2001 (Reel/Frame 012238/0452) in the patent application to Redback Networks, Inc. of San Jose, California. Thus, as the owner at the time the brief is being filed, Redback Networks, Inc. is the real party in interest.

II. RELATED APPEALS AND INTERFERENCES

There are no other appeals or interferences that will directly affect, be directly affected by or have a bearing on the Board's decision in this Appeal.

III. STATUS OF CLAIMS

Claims 1, 2, 4-8, 10-29, 31-35, and 37-43 are currently pending and rejected in the Application. Claims 3, 9, 30, and 36 are canceled. The Appellants respectfully appeal the rejections of claims 1, 2, 4-8, 10-29, 31-35, and 37-43.

IV. STATUS OF AMENDMENTS

No amendments were submitted after the Final Office Action mailed August 27, 2009.

V. SUMMARY OF THE CLAIMED SUBJECT MATTER

Claim 1 recites a computer implemented method comprising: receiving by a second network process a first set of data from a first network process (*See* pg. 6, lines 1-9); receiving a notification of death of the first network process (*See* pg. 6, lines 16-24); clearing the first set of data by the second network process if a time period expires, the time period beginning upon receiving the notification of death (*See* pg. 7, lines 1-15 and pg. 14, lines 17-26); and synchronizing by the second network process the first set of data with a second set of data if the time period does not expire, the second set of data received from the first network process after the first network process restarts (*See* pg. 16, lines 1-4; FIG. 14, element 1313).

Claim 7 recites a computer implemented method comprising: detecting death of a first network process (*See* pg. 15, lines 4-15); restarting the first network process (*See* pg. 15, lines 4-15); restoring a set of configurations to the first network process (*See* pg. 15, lines 4-15); if a first set of data is generated by the first network process before a time period expires, the time period beginning upon receiving by the second network process a notification of death of the first network process, then synchronizing by the second network process the first set of data with a second set of data, the second set of data having been generated by the first network process before the death of the first network process (*See* pg. 16, lines 1-4; FIG. 13, element 1313); and if the time period expires, then clearing the second set of data by the second network process (*See* pg. 7, lines 1-15 and pg. 14, lines 17-26).

Claim 12 recites a network element comprising: a cross connect control module to host a first and second network process, the first network process to generate a first set of data after restarting and the second network process to synchronize for itself the first set of data with a second set of data generated by the first network process before restarting upon determining a time period has not expired, the second network process to clear the first set of data upon determining the time period has expired, the time period beginning upon receiving a notification of death of the first network process (*See* pg. 16, lines 1-4; FIG. 13, element 1313); and a traffic card coupled to the cross connect module, the traffic card to process a set of traffic with the synchronized first and second set of data (*See* pg. 12, lines 14-19).

Claim 16 recites a network element comprising: a first processor to execute a first and second network process, the first network process to generate a first set of data before restarting and a second set of data after restarting, the second network process to synchronize for itself the first and second set of data upon determining a time period has not expired, the second network process to clear the first set of data upon determining the time period has expired, the time period beginning upon receiving a notification of death of the first network process (*See* pg. 16, lines 1-4; FIG. 13, element 1313); and a second processor coupled to the first processor, the second processor to process a set of traffic using the first set of data before the first network process restarts and a third set of data after the first network process restarts (*See* pg. 12, lines 7-19; pg. 12, Table 1, pg. 13, Table 2).

Claim 20 recites a network element comprising: a first memory to host a first network process, the first network process to generate a first set of data before restarting and a second set of data after restarting (*See* pg. 14, lines 1-16); a second memory coupled to the first memory, the second memory to host a second network process, the second network process using the first and second set of data if a time period has not expired, the second network process to clear the first set of data if the time period has expired, the time period beginning upon receiving a notification of death of the first network process (*See* pg. 16, lines 1-4; FIG. 13, element 1313); and a third memory coupled to the first and second memory, the third memory to store the first set of data before the first network processes restarts and to store for itself a synchronized set of the first and second set of data after the first network process restarts (*See* pg. 14, lines 1-16).

Claim 24 recites a system comprising: a first network element to execute a first network process, the first network process to generate a first set of data before restarting and a second set of data after restarting (*See* pg. 12, lines 7-19; pg. 12, Table 1, pg. 13, Table 2); and a second network element coupled to the first network element, the second network element to execute a second network process, to receive a notification of death of the first network process, to start a counter upon receiving the notification of death, to store the first and second set of data, to clear the first set of data upon determining the counter has exceeded a time period and to synchronize for itself the first and second set of data upon determining the counter has not exceeded the time period (*See* pg. 12, lines 14-19).

Claim 28 recites a machine-readable medium that provides instructions, which when executed by a set of processors of one or more processors, cause said set of processors to perform operations comprising: receiving by a second network process a first set of data from a first network process (*See* pg. 6, lines 1-9); receiving a notification of death of the first network process (*See* pg. 6, lines 16-24); clearing the first set of data by the second network processes if a time period expires, the time period beginning upon receiving the notification of death (*See* pg. 7, lines 1-15 and pg. 14, lines 17-26); and synchronizing the first set of data with a second set of data if the time period does not expire, the second set of data received from the first network process after the first network process restarts (*See* pg. 16, lines 1-4; FIG. 13, element 1313).

Claim 34 recites a machine-readable medium that provides instructions, which when executed by a set of processors of one or more processors, cause said set of processors to perform operations comprising: detecting death of a first network process (*See* pg. 15, lines 4-15); restarting the first network process (*See* pg. 15, lines 4-15); restoring a set of configurations to the first network process (*See* pg. 15, lines 4-15); if a first set of data is generated by the first network process before a time period expires, the time period beginning upon receiving by the second network process a notification of death of the first network process, then synchronizing the first set of data by a second network process with a second set of data, the second set of data having been generated by the first network process before the death of the first network process (*See* pg. 16, lines 1-4; FIG. 13, element 1313); and if the time period expires, then clearing the second set of data by the second network process (*See* pg. 7, lines 1-15 and pg. 14, lines 17-26).

Claim 39 recites a method of a first network process, comprising: receiving data from a second network process (*See* pg. 15, lines 4-15); receiving a death notification regarding the second network process (*See* pg. 15, lines 4-15); determining the data received before the death of the second network process is stale based on the death notification (*See* pg. 15, lines 16-20; FIG. 13, element 1313); receiving new data from the second network process after it has been restarted (*See* pg. 15, lines 16-19; FIG. 13, element 1313); storing the new data as a temporary data (*See* pg. 15, lines 21-25; FIG. 13, element 1317); clearing the stale data upon determining that a timer has expired (*See* pg. 16, lines 1-4; FIG. 13, element 1305); and synchronizing by the first network process for itself the stale data and the new data if a done signal is received from the second network process before the timer expires, the timer being started upon receiving the death notification (*See* pg. 16, lines 1-4; FIG. 13, element 1313).

Claim 43 recites a method comprising: receiving a first data from a first network process at a second network process (*See* pg. 6, lines 1-9); receiving a notification of death of the first network process (*See* pg. 6, lines 16-24); marking the first data as stale by the second network process (*See* pg. 13, lines 1-19 to pg. 15, lines 16-25); starting a timer for stale data by the second network process, the timer being started upon receiving the notification of death (*See* pg. 13, lines 1-19 to pg. 14, lines 1-25); receiving a notification of first process revival (*See* pg. 15, lines 16-25); and clearing a stale indication if the timer has not expired at the second process in response to the notification of first process revival (*See* pg. 16, lines 1-4).

VI. GROUND OF REJECTION TO BE REVIEWED ON APPEAL

The issues involved in this Appeal are as follows:

- A. Whether claims 1 and 28 are anticipated under 35 U.S.C. § 102(e) based on Bishop *et al.* (U.S. 6,983,317) (“Bishop”).
- B. Whether claims 2, 4-8, 10, 11, 16-27, 29, 31-35, and 37-43 are obvious under 35 U.S.C. § 103(a) based Fuchs *et al.* (U.S. 5,440,726) (“Fuchs”) in view of Bishop.
- C. Whether claims 12-15 are obvious under 35 U.S.C. § 103(a) based Kidder *et al.* (U.S. 6,694,450) (“Kidder”) in view of Damani *et al.* (5,938,775) (“Damani”) and Bishop.

All of the claims do not stand or fall together. The basis for the separate patentability of the claims is set forth below.

VII. ARGUMENT

A. Rejection of Claims 1 and 28 under 35 U.S.C. § 102(e) Based on Bishop

Claims 1 and 28 stand rejected under 35 U.S.C. § 102(e) as being anticipated by Bishop. The Appellants respectfully request that these rejections be reversed for at least the following reason. Bishop does not describe each and every element of the claims.

For a prior art reference to anticipate, 35 U.S.C. §102 requires that “each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference.”

In re Robertson, 169 F.3d 743, 745, 49 USPQ2d 1949, 1950 (Fed. Cir. 1999) (*quoting Verdegaal Bros., Inc. v. Union Oil Co.*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987)). Further, the Federal Circuit held that for a cited reference to anticipate a claim, it must describe all the elements **arranged in the same way** as recited in the claim. *Net MoneyIN Inc. v. Verisign Inc.*, 545 F.3d 1359 (Fed. Cir. 2008).

1. Independent Claims 1 and 28

a. Independent claims 1 and 28 are not anticipated because Bishop does not disclose clearing data upon expiration of a time period beginning upon receiving a notification of death

Independent claims 1 and 28 recite, among other limitations, “clearing the first set of data by the second network process if a time period expires, the time period *beginning* upon *receiving* the notification of death [of the first network process]” [emphasis added].

The Examiner states that Bishop discloses these aspects in col. 101, lines 52-58, col. 103, lines 10-23, col. 104, lines 62-66, and col. 130, lines 59-61. The Examiner states that these passages indicate that a “heartbeat period reaches timeout and eviction period upon notification of death expires [*sic*] and engine monitoring manager removes [*sic*] the engine from its list.” *See* Final Office Action mailed August 27, 2009, pgs. 3 and 4. The Examiner asserts that a “heartbeat indicator” of Bishop equates to the notification of death recited in the claims and an “eviction period” of Bishop equates to the time period beginning upon receiving the notification of death recited in the claims. *Id.* at pg. 2, “upon notification of death by the heartbeat indicator, the eviction period is started for clearing date [*sic*] data.” The Appellants respectfully disagree with the Examiner’s assertions that Bishop’s “heartbeat indicator” and “eviction period” equate to the notification of death and the time period, respectively.

Bishop’s “heartbeat indicator” does not equate to a notification of death. Bishop discloses that a “heartbeat is a message that is sent to all available engines to inform them of its existence.” *See* Bishop, col. 102, lines 24 and 25. One example or default value of a “polling interval” that serves as the “[i]nterval between [h]eartbeats” is every 5 seconds. *Id.* at col. 102, lines 7 and 8. In this example, a heartbeat occurs every 5 seconds to indicate that an engine exists. Therefore, when an engine produces a heartbeat, the heartbeat does not act as a notification of death, but rather acts as a notification that the engine is **not dead**. If the engine was dead, it would not be able to produce a heartbeat. Accordingly, Bishop’s “heartbeat indicator” does not equate to a notification of death.

Bishop’s “eviction period” does not equate to a time period that **begins** upon receiving a notification of death of the first network process. The eviction period is a period of time in which the engine monitoring manager has not received a heartbeat, *e.g.*, 15 minutes. *See* Bishop, col. 104, lines 6-9. In this example, the eviction period represents a time period of at least 15

minutes beginning at **the last heartbeat** of the engine. However, as stated above, a heartbeat is not a notification of death. Since Bishop's eviction period does not begin upon receiving a notification of death, the eviction period does not equate to the time period recited in the claims. The Examiner fails to directly address this aspect of the eviction period in Bishop. Therefore, Bishop fails to disclose a time period with the recited characteristics, namely a time period beginning upon receipt of a notification of death.

In view of the foregoing, Bishop fails to disclose all the elements of claims 1 and 28 arranged in the same way as in claims 1 and 28, including "clearing the first set of data by the second network process if a time period expires, the time period beginning upon receiving the notification of death [of the first network process]." The Appellants respectfully request reversal of these rejections.

b. Independent claims 1 and 28 are not anticipated because Bishop does not disclose synchronizing data after a restart if the time period does not expire

Independent claims 1 and 28 recite, among other limitations, "synchronizing by the second network process the first set of data with a second set of data if the time period does not expire, the second set of data received from the first network process after the first network process *restarts*" [emphasis added]. The Examiner asserts that col. 52, lines 27-61, col. 102, lines 46-53, col. 103, lines 25-62, and col. 104, line 62 – col. 105, line 17 of Bishop disclose these aspects. The Examiner states that these passages disclose "if the eviction time period does not expire, the data from the engine is merged and updated with the engine monitoring manager." See Final Office Action mailed August 27, 2009, pg. 4. The Examiner adds that "[t]he restart/recovery takes place when the process goes from being off-line to being on-line by sending a heartbeat, and the heartbeat being received before the heartbeat timeout period is over (col. 104 line 25 – col. 105 line 17)." *Id.* at pg. 3. The Appellants respectfully disagree with the Examiner's characterization of Bishop.

Bishop discloses restarting an engine, but it has no relationship to a scenario where the time period that begins upon notification of death has not expired. As noted in the immediately preceding section of this Brief, the Examiner asserts that Bishop's eviction period equates to the time period recited in the claims. The Examiner does not specifically address the eviction period in this portion of the rejection, but rather alleges that col. 104, line 25 – col. 105, line 17 of

Bishop discloses restarting an engine “before the heartbeat timeout period is over.” Thus, the Appellants assume that the Examiner intends for the term heartbeat timeout period, which does not occur in Bishop, to refer to the eviction timeout period of Bishop described in col. 104, lines 61-63 cited by the Examiner (“(4) if any engines, reach the ‘eviction timeout’ period, the message ‘Engine has been evicted’, will be sent”). Nevertheless, the Appellants cannot discern which part of the cited lines support the Examiner’s interpretation of Bishop. Bishop discloses recovery and restarting **after** an engine has been evicted. *See* Bishop, col. 104, lines 26-28, “This process is defined by an engine that has been evicted or timed-out (‘OffLine’), but the engine restarts or reappears into the Network system.” *See also* Bishop, col. 104, lines 43 and 44, “In the event of recovery of an engine [since] eviction or timeout process, the EMM component of other engine at the subsite perform the following steps” By Bishop’s own definition, if an engine has been evicted, the eviction period **has expired**. Accordingly, any mention of an engine restarting, reappearing, or recovering in Bishop occurs after eviction of the engine. Thus, Bishop fails to disclose the same arrangement of elements as recited in claims 1 and 28, including synchronization of data received **after** a process restart and on the condition that the time period **has not expired**. Since Bishop does not disclose the particular arrangement of elements recited in the claims, these rejections based on Bishop are improper.

In view of the foregoing, Bishop fails to disclose all the elements of claims 1 and 28 arranged in the same way as in claims 1 and 28, including “synchronizing by the second network process the first set of data with a second set of data if the time period does not expire, the second set of data received from the first network process after the first network process restarts.” The Appellants respectfully request reversal of these rejections.

B. Rejection of Claims 2, 4-8, 10, 11, 16-27, 29, 31-35, and 37-43 under 35 U.S.C. § 103(a) Based on Fuchs and Bishop

Claims 2, 4-8, 10, 11, 16-27, 29, 31-35, and 37-43 stand rejected under 35 U.S.C. § 103(a) as being obvious over Fuchs and Bishop. The Appellants respectfully request reversal of these rejections because the cited references do not teach or suggest all the limitations. Further, these claims include additional limitations from independent claims 1 and 28, which were separately rejected and are thus separately patentable because the distinct rejection based on

obviousness, rather than anticipation, does not allow for these claims to stand or fall with claims 1 and 28.

1. Independent Claims 7, 16, 20, 24, 34, 39, and 43; Dependent Claims 2, 4-6, 8, 10, 11, 17-19, 21-23, 25-27, 29, 31-33, 35, 37, 38, and 40-42

Independent claims 7, 16, 20, 24, 34, 39, and 43 recite “if a first set of data is generated by the first network process before a time period expires, the time period beginning upon receiving by the second network process a notification of death of the first network process, then synchronizing by the second network process the first set of data with a second set of data” or analogous aspects. For the reasons set forth in section VII.A of this Brief, Bishop does not disclose the aspects involving the time period beginning upon notification of death. The Examiner does not indicate and the Appellants do not discern any part of Fuchs that cures the aforementioned deficiencies of Bishop regarding these limitations. Therefore, the cited references do not teach or suggest all the limitations of independent claims 7, 16, 20, 24, 34, 39, and 43. Claims 2, 4-6, 8, 10, 11, 17-19, 21-23, 25-27, 29, 31-33, 35, 37, 38, and 40-42 depend from one of independent claims 7, 16, 20, 24, 34, and 39 and thus incorporate the respective limitations thereof. For at least the above reasons regarding the independent claims, the cited references fail to teach or suggest all the limitations of these dependent claims. Accordingly, the Appellants respectfully request reversal of these rejections.

C. Rejection of Claims 12-15 under 35 U.S.C. § 103(a) Based on Kidder, Damani and Bishop

Claims 12-15 stand rejected under 35 U.S.C. § 103(a) as being obvious over Kidder, Damani, and Bishop. The Appellants respectfully request reversal of these rejections because the cited references do not teach or suggest all the limitations.

1. Independent Claim 12; Dependent Claims 13-15

Independent claim 12 recites “the first network process to generate a first set of data after restarting and the second network process to synchronize for itself the first set of data with a second set of data generated by the first network process before restarting upon determining a time period has not expired, the second network process to clear the first set of data upon determining the time period has expired, the time period beginning upon receiving a notification of death of the first network process.” For the reasons set forth in section VII.A of this Brief, Bishop does not disclose the aspects involving the time period beginning upon notification of death. The Examiner does not indicate and the Appellants do not discern any part of Kidder or Damani that cures the aforementioned deficiencies of Bishop regarding these limitations. Therefore, the cited references do not teach or suggest all the limitations of independent claim 12. Claims 13-15 depend from independent claim 12 and thus incorporate the limitations thereof. For at least the above reasons regarding independent claim 12, the cited references do not teach or suggest all the limitations of these dependent claims. Therefore, the Appellants respectfully request reversal of these rejections.

B. Rejection of Claims 2, 4-8, 10, 11, 16-27, 29, 31-35, and 37-43 under 35 U.S.C. § 103(a) Based on Fuchs and Bishop

Claims 2, 4-8, 10, 11, 16-27, 29, 31-35, and 37-43 stand rejected under 35 U.S.C. § 103(a) as being obvious over Fuchs and Bishop.

C. Rejection of Claims 12-15 under 35 U.S.C. § 103(a) Based on Kidder, Damani and Bishop

Claims 12-15 stand rejected under 35 U.S.C. § 103(a) as being obvious over Kidder, Damani, and Bishop.

Respectfully submitted,

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CERTIFICATE OF TRANSMISSION

I hereby certify that this correspondence is being submitted to the United States Patent and Trademark Office electronically via EFS Web on the date shown below.


Susan M. Manriquez

2/1/2010
February 1, 2010

VIII. CLAIMS APPENDIX

1. (Previously Presented) A computer implemented method comprising:
receiving by a second network process a first set of data from a first network process;
receiving a notification of death of the first network process;
clearing the first set of data by the second network process if a time period expires, the time period beginning upon receiving the notification of death; and
synchronizing by the second network process the first set of data with a second set of data if the time period does not expire, the second set of data received from the first network process after the first network process restarts.
2. (Previously Presented) The computer implemented method of claim 1 further comprising indicating the first set of data as stale upon receiving the notification of death.
3. (Canceled)
4. (Original) The computer implemented method of claim 1 wherein the first set of data and the second set of data are synchronized after a done signal is received.
5. (Previously Presented) The computer implemented method of claim 1 further comprising restoring a set of configurations to the network process after the first network process restarts.
6. (Original) The computer implemented method of claim 1 further comprising clearing the second set of data if the time period expires and a done signal is not received.
7. (Previously Presented) A computer implemented method comprising:
detecting death of a first network process;

restarting the first network process;
restoring a set of configurations to the first network process;
if a first set of data is generated by the first network process before a time period expires, the time period beginning upon receiving by the second network process a notification of death of the first network process, then synchronizing by the second network process the first set of data with a second set of data, the second set of data having been generated by the first network process before the death of the first network process; and
if the time period expires, then clearing the second set of data by the second network process.

8. (Previously Presented) The computer implemented method of claim 7 further comprising indicating the second set of data as stale upon receiving the notification of death.

9. (Canceled)

10. (Original) The computer implemented method of claim 7 wherein the first set of data and the second set of data are synchronized after a done signal is received.

11. (Original) The computer implemented method of claim 7 further comprising clearing the second set of data if the time period expires and a done signal is not received.

12. (Previously Presented) A network element comprising:

a cross connect control module to host a first and second network process, the first network process to generate a first set of data after restarting and the second network process to synchronize for itself the first set of data with a second set of data generated by the first network process before restarting upon determining a time period has not expired, the second network

process to clear the first set of data upon determining the time period has expired, the time period beginning upon receiving a notification of death of the first network process; and

a traffic card coupled to the cross connect module, the traffic card to process a set of traffic with the synchronized first and second set of data.

13. (Original) The network element of claim 12 wherein the cross connect module comprises a first and second memory to host the first and second network process.

14. (Original) The network element of claim 12 wherein the traffic card comprises a set of processors to process the first and second set of data.

15. (Previously Presented) The network element of claim 12 wherein the cross connect module comprises:

a first memory to host the first network process;

a second memory coupled to the first memory, the second memory to host the second network process; and

a third memory coupled to the first and second memory, the third memory to store the first set of data, second set of data, and the synchronized set of data.

16. (Previously Presented) A network element comprising:

a first processor to execute a first and second network process, the first network process to generate a first set of data before restarting and a second set of data after restarting, the second network process to synchronize for itself the first and second set of data upon determining a time period has not expired, the second network process to clear the first set of data upon determining the time period has expired, the time period beginning upon receiving a notification of death of the first network process; and

a second processor coupled to the first processor, the second processor to process a set of traffic using the first set of data before the first network process restarts and a third set of data after the first network process restarts.

17. (Previously Presented) The network element of claim 16 wherein the first processor comprises a memory to store the first, second and third set of data.

18. (Previously Presented) The network element of claim 16 further comprising the first processor to allocate a first memory to the first network process and a second memory to the second network process.

19. (Previously Presented) The network element of claim 16 further comprising the first processor to allocate a first memory to the first network process, a second memory to the second network process, and a third memory to store the first set of data, the second set of data, and the third set of data.

20. (Previously Presented) A network element comprising:

a first memory to host a first network process, the first network process to generate a first set of data before restarting and a second set of data after restarting;

a second memory coupled to the first memory, the second memory to host a second network process, the second network process using the first and second set of data if a time period has not expired, the second network process to clear the first set of data if the time period has expired, the time period beginning upon receiving a notification of death of the first network process; and

a third memory coupled to the first and second memory, the third memory to store the first set of data before the first network processes restarts and to store for itself a synchronized set of the first and second set of data after the first network process restarts.

21. (Previously Presented) The network element of claim 20 wherein the first memory, the second memory and the third memory are main memory.
22. (Previously Presented) The network element of claim 20 wherein the first memory, the second memory, and the third memory are mass storage.
23. (Previously Presented) The network element of claim 20 wherein the first memory, the second memory, and the third memory are a set of regions of a memory.
24. (Previously Presented) A system comprising:
- a first network element to execute a first network process, the first network process to generate a first set of data before restarting and a second set of data after restarting; and
 - a second network element coupled to the first network element, the second network element to execute a second network process, to receive a notification of death of the first network process, to start a counter upon receiving the notification of death, to store the first and second set of data, to clear the first set of data upon determining the counter has exceeded a time period and to synchronize for itself the first and second set of data upon determining the counter has not exceeded the time period.
25. (Previously Presented) The system of claim 24 wherein the second network element comprises:
- a first memory to store the first set of data and the synchronized set of data; and a second memory to store the second set of data.
26. (Previously Presented) The system of claim 24 further comprising the second network element to clear the first and second set of data if a time period expires.

27. (Previously Presented) The system of claim 24 further comprising the second network element to mark the first set of data as stale upon receiving the notification of death.

28. (Previously Presented) A machine-readable medium that provides instructions, which when executed by a set of processors of one or more processors, cause said set of processors to perform operations comprising:

receiving by a second network process a first set of data from a first network process;

receiving a notification of death of the first network process;

clearing the first set of data by the second network processes if a time period expires, the time period beginning upon receiving the notification of death; and

synchronizing the first set of data with a second set of data if the time period does not expire, the second set of data received from the first network process after the first network process restarts.

29. (Previously Presented) The machine-readable medium of claim 28 further comprising indicating the first set of data as stale upon receiving the notification of death.

30. (Canceled)

31. (Previously Presented) The machine-readable medium of claim 28 wherein the first set of data and the second set of data are synchronized after a done signal is received.

32. (Previously Presented) The machine-readable medium of claim 28 further comprising restoring a set of configurations to the first network process after the first network process restarts.

33. (Previously Presented) The machine-readable medium of claim 28 further comprising clearing the second set of data if the time period expires and a done signal is not received.

34. (Previously Presented) A machine-readable medium that provides instructions, which when executed by a set of processors of one or more processors, cause said set of processors to perform operations comprising:

detecting death of a first network process;

restarting the first network process;

restoring a set of configurations to the first network process;

if a first set of data is generated by the first network process before a time period expires, the time period beginning upon receiving by the second network process a notification of death of the first network process, then synchronizing the first set of data by a second network process with a second set of data, the second set of data having been generated by the first network process before the death of the first network process; and

if the time period expires, then clearing the second set of data by the second network process.

35. (Previously Presented) The machine-readable medium of claim 34 further comprising indicating the second set of data as stale upon receiving the notification of death.

36. (Canceled)

37. (Previously Presented) The machine-readable medium of claim 34 wherein the first set of data and the second set of data are synchronized after a done signal is received.

38. (Previously Presented) The machine-readable medium of claim 34 further comprising clearing the second set of data if the time period expires and a done signal is not received.
39. (Previously Presented) A method of a first network process, comprising:
- receiving data from a second network process;
 - receiving a death notification regarding the second network process;
 - determining the data received before the death of the second network process is stale based on the death notification;
 - receiving new data from the second network process after it has been restarted;
 - storing the new data as a temporary data;
 - clearing the stale data upon determining that a timer has expired; and
 - synchronizing by the first network process for itself the stale data and the new data if a done signal is received from the second network process before the timer expires, the timer being started upon receiving the death notification.
40. (Previously Presented) The method of claim 39, wherein the timer is initialized upon receipt of the death notification.
41. (Previously Presented) The method of claim 40, wherein the death notification is based on an absence of a heartbeat from the second network process.
42. (Previously Presented) The method of claim 39, further comprising clearing the stale data and the new data if the timer expires before the done signal is received.
43. (Previously Presented) A method comprising:
- receiving a first data from a first network process at a second network process;

receiving a notification of death of the first network process;
marking the first data as stale by the second network process;
starting a timer for stale data by the second network process, the timer being started upon
receiving the notification of death;
receiving a notification of first process revival; and
clearing a stale indication if the timer has not expired at the second process in response to
the notification of first process revival.

IX. EVIDENCE APPENDIX

No related evidence exists.

X. **RELATED PROCEEDINGS APPENDIX**

No related proceedings exist.